UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

August 7, 2014

Mr. Chris Church
National Park Service,
Denver Service Center,
12795 W. Alameda Parkway
P.O. Box 25287
Denver, CO 80225-0287

SUBJECT: Final Environmental Impact Statement (FEIS): Canaveral National Seashore (CNS) Project, General Management Plan (GMP), Implementation, Brevard and Volusia Counties, FL.
CEQ No. 20140188

Dear Mr. Church:

To fulfill EPA's Clean Air Act (CAA) 8 309 and National Environmental Policy Act (NEPA) § 102(2)(C) responsibilities, EPA reviewed the above FEIS for the proposed action: the GMP. Under 8 309, EPA is directed to review and comment publicly on the environmental impacts of Federal activities, including actions for which environmental impact statements are prepared.

Background

The CNS is managed by the National Park Service (NPS) in partnership with the National Aeronautics and Space Administration (NASA), which owns approximately 70 percent of the CNS associated with the Kennedy Space Center, and the U.S. Fish and Wildlife Service, which administers the adjacent Merritt Island National Wildlife Refuge where the NPS co-manages with US FWS approximately 34,000 acres.

Purpose & Need: The plan's purpose is to decide how to best fulfill the CNS' purpose, maintain its significance, and protect its resources unimpaired for the enjoyment of present and future generations.

Due to substantially changed conditions since its 1982 inception, the GMP requires updating. The new realignment of the South District beach-access road outside the primary

NASA security zone has facilitated increased visitor traffic as has the highly popular Mosquito-Lagoon boat tours. The CNS has acquired significant archeological and historic resources, e.g., the acquisition of the Seminole Rest property and thirteen retained use and life estates and the discovery of the French fleet's shipwreck survivor's camp, a product of France's 1565 attempt to establish a Florida settlement. Additionally, the historic Eldora State House has been rehabilitated and opened to the public and a research facility has been established. Furthermore, population pressures are increasing, e.g., boat wakes damaging oyster reefs, boat anchors damaging sea-grass beds, and boat traffic decreasing angler enjoyment. Moreover, there is pressure to allow personal watercraft and provide commercial services.

Description: The proposed action, this GMP, provides guidance for the next 20 plus years on sustaining natural systems, preserving cultural resources, and providing a quality visitor experience opportunity. Any proposed development consistent with the proposed action would require feasibility studies, detailed planning, and environmental documentation. Additionally, GMP implementation is dependent upon the available type of resources and consequently may occur in phases over many years.

Alternatives: This DEIS evaluated four alternatives, including the No Action Alternative, for managing the national seashore in context of seven management zones. Each alternative proposes a different configuration of the management zones based on its concept. The intent for every management zone is to preserve and protect natural and cultural resources to the greatest extent possible given available funds.

Concept: Alternative A (no action) - the CNPS will continue to be managed under the overall operational direction provided in its enabling legislation, previous planning documents, and existing interagency /cooperative agreements.

Concept: Alternative B (preferred action) - the CNS will be managed to preserve and enhance the natural and historic landscape features associated with an eastern Florida coastal barrier island system. Emphasis will be on retaining the relatively undeveloped character and providing an uncrowded experience by dispersing visitors via a shuttle, canoe or kayak, hiking- walking and bicycle trails.

Concept: Alternative C - the **CNS** will be managed in a way so visitors can choose from a variety of access options to land- and water-based natural and cultural features, recreational opportunities, and educational pursuits to facilitate an in-depth understanding of the natural and cultural history of eastern coastal Florida.

Concept: Alternative D - the CNS will be managed with a focus on enhancing lands, resources, and facilities and to promote outdoor recreational and interpretive educational opportunities consistent with preservation of the natural and cultural resources.

The major differences between the four alternatives appear to be in the degree of construction and staffing. For example,

Alternative A - Deferred maintenance items ($6.24 million worth of deferred maintenance backlogged items, including about $5.2 million for roads) will be corrected over the life of this plan. A short list of minor capital improvements ($1 15,000) will be completed. These one-time costs amount to $10.3 million. Estimated annual operations, maintenance, and leasing costs will bring the total annual operating costs to $2.6 million.

Alternative B - the backlog of deferred maintenance will be cleared up ($6.24 million), a series of capital improvements will be implemented (26.9 million), including future planning studies ($2 million). The DEIS states this Alternative requires an additional $1 8.6 million more in expenditures than Alternative A, including: an additional $0.8 million for annual operational costs, 10.5 more full time positions (an annual increase in cost of approximately $785,000).

Alternative C - completes the backlog of deferred maintenance ($6.24 million), proposes many capital improvements ($43.1 million) construction, demolition, and rehabilitation projects, e.g., a new visitor center headquarters facility and a centralized maintenance facility, and future planning studies ($2 million). This Alternative appears to require an additional $34.1 million more in expenditures than Alternative A, including an additional $1.0 million for annual operational costs, an increase of 1 1 full-time equivalent employees and 9 seasonal workers (an annual increase in cost of approximately $1,091,000).

Alternative D - completes the backlog of deferred maintenance ($6.24 million), implements a series' of capital improvements ($21.6 million), provides for limited new development ($42 million) and future planning studies ($2 million). Emphasis is upon improving operations and maintenance efficiencies, protecting the resource, and enhancing the visitor experience through interpretive waysides, exhibits, education / experience opportunities. This Alternative appears to require an additional $55.3 million more in expenditures than Alternative A, including an additional $0.9 million for annual operational costs, an increase of 12.5 full-time equivalent employees, two not to exceed one-year workers and one STEP (student temporary educational program) worker (an annual increase in cost of approximately $934,000).

EPA Comments:

Visitor Dispersal Analysis Recommendations

Under the preferred alternative, the GMP calls for the dispersal of visitors to experience relatively undeveloped areas from the high use areas, e.g., *emphasis will be placed on encouraging visitors to experience relatively undeveloped areas.* The preferred alternative discussion indicates a need to restore disturbed areas (beaches) to natural

conditions as the principle focus of resource management. The proposed solution as discussed in the preferred alternative appears to be dilution. However, the proposed dilution's impacts upon the CNS do not appear to have been discussed, particularly in context of visitor wear and tear. Moreover the preferred alternative appears to be seeking to increase visitors, and thereby increasing the wear and tear upon the CNS without providing any "wear and tear" mitigation. Furthermore, the proposed GMP indicators do not appear to cover the typical non-boating visitor "wear and tear" upon the CNS.

GMP Recommendations - ecosystem services

In the era of shrinking government finances which are reasonably foreseeable to continue shrinking, the EPA encourages the NPS to rethink and investigate its existing resource funding paradigm as part of the proposed GMP. There may be funding/resource opportunities for maintaining and protecting CNS resources in the form of partnerships with nongovernmental organizations and private sector investments. As part of this recommendation to facilitate this objective, the EPA suggests the NPS include an effort to quantify the CNS' ecosystem services, i.e., inventory and determine dollar valuations, in order to more accurately determine the benefit of conserving the CNS as compared to the costs of not conserving.

The *Ecosystem Services* concept was formally defined by the United Nations' 2004 Millennium Ecosystem Assessment (MEA), a four-year study involving more than 1,300 scientists worldwide. The MEA grouped ecosystem services into four broad categories: provisioning, such as the production of food and water; regulating, such as the control of climate and disease; supporting, such as nutrient cycles and crop pollination; and cultural, such as spiritual and recreational benefits.

Examples of ecosystems "services" include: moderating weather extremes and their impacts, dispersing seeds, mitigating drought and floods, protecting people from the sun's harmful ultraviolet rays, cycling and moving nutrients, protecting stream and river channels and coastal shores from erosion, detoxifying and decomposing wastes, controlling agricultural pests, maintaining biodiversity, generating and preserving soils and renewing their fertility,

GMP Recommendations - ecosystem services - climate change

The FEIS states *While the major drivers of climate change are outside the control of the National Park Service but climate change is a phenomenon whose impacts are occurring or are expected in Canaveral National Seashore in the time frame of this management plan.*

As part of the GMP, the EPA encourages the NPS to explore whether the CNS provides ecosystem services that can ameliorate climate change impacts. For example, the economic value of carbon sequestration potential represented by the CNS.

Additionally because Florida has been hard hit by hurricanes, the number of troubled property and casualty insurers in Florida has increased, according to Jupiter-based Weiss Ratings. After analyzing the financial condition of the insurers in Florida as of midyear, Weiss Ratings gave 35 of them a rating of D or F. That's up from 29 with poor grades on Dec. 3 1, 2010. Consequently another economic benefit afforded by the existence of CNS is it encourages sustainable land use requiring less expensive insurance (or risking insolvent insurers) and storm repair plus it provides a buffer against hurricanes for existing inland developments.

GMP Recommendations - ecosystem services - wetlands mitigation

As part of the GMP, the EPA encourages the NPS to explore whether its wetlands restoration efforts can be enhanced by participation in a wetlands mitigation bank through it existing interagency agreements and/or through partnerships with NGOs (e.g., The Nature Conservancy), the US Army Corps of Engineers, etc. A mitigation bank is a managed wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 or a similar state or local wetland regulation.

Green Building

In the spirit of collaboration and technical assistance the EPA recommends some sustainability concepts which could be considered in the final management plan.

Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from design to, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. Green building is also known as a sustainable or high performance building.

Green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation

For example, green buildings may incorporate sustainable materials in their construction (e.g., reused, recycled-content, or made from renewable resources); create healthy indoor environments with minimal pollutants (e.g., reduced product emissions); and/or feature landscaping that reduces water usage (e.g., by using native plants that survive without extra watering).

In the United States, buildings account for:

- 39 percent of total energy use
- 12 percent of the total water consumption
- 68 percent of total electricity consumption
- 38 percent of the carbon dioxide emissions

Potential benefits of green building can include:

Environmental benefits
- Enhance and protect biodiversity and ecosystems
- Improve air and water quality
- Reduce waste streams
- Conserve and restore natural resources

Economic benefits
- Reduce operating costs
- Create, expand, and shape markets for green product and services
- Improve occupant productivity
- Optimize life-cycle economic performance

Social benefits
- Enhance occupant comfort and health
- Heighten aesthetic qualities
- Minimize strain on local infrastructure

Green Parking

Green parking refers to several techniques that when applied together reduce the contribution of parking lots to total impervious cover. From a storm water perspective, green parking techniques applied in the right combination can dramatically reduce impervious cover and, consequently, reduce the amount of storm water runoff. Green parking lot techniques include: setting minimums of permanent parking spaces; minimizing the dimensions of parking lot spaces; utilizing alternative pavers in overflow parking areas; using bioretention areas to treat storm water; encouraging shared parking.

Green parking lots can dramatically reduce the creation of new impervious cover. How much is reduced depends on the combination of techniques used to achieve the greenest parking. While the pollutant removal rates of bioretention areas have not been directly measured, their capability is considered comparable to a dry swale, which removes 91 percent of total suspended solids, 67 percent of total phosphorous, 92 percent of total nitrogen, and 80-90 percent of metals (Claytor and Schueler, 1996).

North Carolina's Fort Bragg vehicle maintenance facility parking lot is an excellent example of the benefits of rethinking parking lot design (NRDC, 1999). The redesign incorporated storm water management features, such as detention basins located within grassed

islands, and an onsite drainage system that exploited existing sandy soils. The redesign reduced impervious cover by 40 percent, increased parking by 20 percent, and saved 20 percent or $1.6 million on construction costs over the original, conventional design.

Briefly three other sustainable activities which may applicable to the Park Service's general management plan are as follows:

- Green Detention Ponds
- Rain Water Harvesting
- Rain Gardens

Thank you for the opportunity to review this FEIS. EPA supports Alternative B, The NPS Preferred Alternative with the suggested considerations. Please contact Ken Clark of my staff at (404) 562- 8282 if you have any questions or want to discuss our comments further.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
EPA Region 4